WHAT IS CLAIMED IS:

1.   A method for protecting equipment in a network element, comprising:

receiving a protection request for a first equipment
5   item;

receiving the protection request for a second equipment item;

determining a higher priority item between the first and second equipment items; and

10   performing the protection request for the higher priority item.

2.   The method of Claim 1, wherein the equipment items comprise line interface cards.

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3.   The method of Claim 2, wherein line interface cards each comprise a plurality of single user connections.

20   4.   The method of Claim 2, wherein the line connection interface cards each comprise only single user connections.

5.   The method of Claim 2, wherein the line
25   interface cards each comprise the plurality of DS-1 connections.

6.   The method of Claim 2, further comprising determining the higher priority item based on an
30   identifier of the line interface cards.

7.   The method of Claim 1, further comprising:

performing the protection request for the first equipment item in an absence of the protection request for the second equipment item;

5   determining the higher priority item in response to receiving the protection requests for the second equipment item; and

deactivating the protection request for the first equipment item in response to determining the second

10   equipment item is the higher priority item.

8.   The method of Claim 1, wherein the protection request comprises an activation request, further comprising determining the higher priority item in

15   response to the activation request for the first and second equipment items.

9.   The method of Claim 1, wherein the request is a first request, further comprising:

20   receiving a second request, the second request comprising a deactivation request for a disparate equipment item; and

determining the higher priority item for the first request in response to the deactivation request.

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10.   The method of Claim 1, further comprising receiving the protection request for at least one of the equipment items from a network operator.

30   11.   The method of Claim 1, further comprising receiving the protection request for at least one of the equipment items automatically in response to failure of the equipment item.

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12. The method of Claim 1, wherein the protection request is a first protection request, further comprising:

5   receiving a second protection request for a third equipment item;

determining a higher priority request between the first and second protection requests;

determining the higher priority item between the

10   first and second equipment items if the first protection request is the higher priority request; and

performing the second protection request if it is the higher priority request.

13.   A method for providing 1:N protection switching
for equipment in a network element, comprising:

   receiving a protection request for an equipment
item;

5   evaluating a priority of the request and a priority
of the equipment item relative to all other outstanding
protection requests for equipment items in a protection
group with the equipment item; and

   performing a highest priority protection request for
10   a highest priority equipment item.

   14.   The method of Claim 13, wherein the equipment
items comprise line interface cards.

15   15.   The method of Claim 14, wherein the line
interface cards each comprise a plurality of single user
connections.

   16.   The method of Claim 15, wherein the single user
20   connections comprise DS-1 connections.

   17.   The method of Claim 13, wherein the priority of
the equipment items are evaluated based on an identifier
of the equipment items.

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18. A system for providing protection switching for equipment in a network element, comprising:

an encoded medium;

logic encoded on the medium, the logic operable to
5 receive a protection request for an equipment item, evaluate a priority of the request and a priority of the equipment item relative to all other outstanding protection requests for equipment items in a protection group with the equipment item and perform a highest
10 priority protection request for a highest priority equipment item.

19. The system of Claim 18, wherein the equipment items in the protection group comprise line interface
15 cards.

20. The system of Claim 19, wherein the line interface cards each comprise a plurality of single user connections.
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21. The system of Claim 20, wherein the single user connections comprise DS-1 connections.

22. The system of Claim 18, wherein the priority of
25 the equipment items are evaluated based on identifiers of the equipment items.

23.   A system for providing protection switching for equipment in a network element, comprising:

means for receiving a protection request for an equipment item;

5   means for evaluating a priority of the request and a priority of the equipment item relative to all other outstanding protection requests for equipment items in a protection group with the equipment item; and

means for performing a highest priority protection

10   request for a highest priority equipment item.

24.   The system of Claim 23, wherein the equipment items in the protection group comprise line interface cards.

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25.   The system of Claim 24, wherein the line interface cards each comprise a plurality of single user connections.

20   26.   The system of Claim 25, wherein the single user connections comprise a plurality of DS-1 connections.

27. A network element for a telecommunications system; comprising:

a protection group including a plurality of working line interface cards and a protection line interface
5   card;

a protection controller operable to store a state of each working and protection line interface card in the protection group; and

a finite state machine operable to activate a
10   highest priority protection request for a highest priority equipment item between all outstanding protection requests for equipment items in the protection group based on the states of the working and protection line interface cards.

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